

The experimental and clinical demonstration of the destructive action of certain complex organic

ACTION OF

ATOXYL ON EYES.

arsenical compounds upon trypanosomes and spirochaetes has stimulated extensive studies of their effects in the human body under various conditions. While the beneficial clinical action of these substances cannot be denied experience has shown that their use is not entirely free from certain dangers. Atoxyl which is one of the earliest of these compounds introduced into practical medicine has been universally employed for some time and therefore has been best studied. Among a number of untoward symptoms noted following its use, blindness occupies a prominent place as shown by the interesting contribution recently made by Dr. Kurt Steindorff of Berlin (*Berliner Klinische Wochenschrift*, October 3, 1910). From a careful search of the literature he has been able to collect as many as 95 cases of disturbances of vision or actual blindness following the use of atoxyl. Judging from the case reports it would appear that the ocular disturbances are often preceded by other manifestations of intoxication, such as general malaise, more or less dizziness, headache, nausea or vomiting, colicky pains, deafness, lowering of the body temperature, and renal disorders.

The symptoms referable to the eyes consist of varying diminution of the sight with concentric diminution of the field of vision, more on the nasal than on the temporal side. The examination of the eye-grounds is at first negative with possibly the exception of some constriction of the retinal arteries and venous congestion. After a time usually a few weeks the papillae appear pale, and the condition progresses with considerable rapidity to complete optic atrophy, associated with augmenting dimness of vision until blindness is complete. The outlook is serious for stopping the drug does not appear to check the progress of the process nor does other treatment seem to have any effect for improvement.

The ocular symptoms are evidently not a result of the disease for which the drug was employed for in the conditions in which it was used ocular symptoms of this character are unusual. Chronic alcoholism predisposes to the development of the complication. On the other hand, an eye already the subject of disease often shows an increase in development of the original disorder. Thus Wassermann noted in some of his cases of tabetic optic atrophy rapid progress of the ocular lesion while the patients were under the influence of the drug. An analysis of the modes of administration in the cases in which these ocular manifestations were observed does not throw any light on the subject. However, it has been suggested by Beck that the patients in whom the more severe symptoms were noted, had received small daily doses without interval for a long time, or large doses at short intervals and that this may have had some influence in the production of the ocular disturbances. Conditions of age, sex, severity of the disease for which the drug was given, or whether the drug was administered beneath the skin, into the muscles or subarachnoid space do not appear to bear any relation

to the incidence of the unfortunate complication.

The pathology of the condition has not yet been fully investigated. Nonne, however, has reported the results of a microscopic study in one case. The retina was not examined but examination of the optic nerve showed symmetrical degeneration extending back to the chiasma. No inflammatory reaction was observed. Whether the anilin or arsenic constituent of the atoxyl molecule is responsible for the process is difficult to say, both substances in rare instances leading to eye disorders, usually, however, of the nature of an optic neuritis rather than primary atrophy as is the case with atoxyl.

With these important facts in mind greater care will have to be exercised in the use of this drug and probably of other more or less similar preparations. Thus arsacetin although much less toxic than atoxyl has also given rise to more or less similar symptoms to those following the use of the stronger and therapeutically more efficient atoxyl.

The editorial notes on advertising, which appeared in the October JOURNAL, have brought

A WORD ON ADVERTISING.

fourth a number of quite interesting letters from members, from advertisers and from other publications. We are making an effort to find out which advertisers are getting direct returns from their advertisements, and the result, so far, is remarkably gratifying. Certainly the letters thus far received are at least significant of one thing—more different kinds of people read such editorial notes than was supposed. But the advertising question and advertising in general have gone through a veritable revolution in the last few years, and if your JOURNAL did not start it, at least we were in at the start. The STATE JOURNAL was almost the first publication in this country to announce in its editorial columns the fact that it assumed responsibility for its advertisers. Of course, we have been "stung" occasionally, but in the main we have had clean pages and those who patronized our advertisers have had a square deal. The proprietary medicine question is now practically settled; only time is now necessary to make the work of the Council on Pharmacy and Chemistry complete and place all proprietary preparations where we shall know exactly what class each belongs in. The prominence of the manufacturer will have no weight as against the word of the Council; these preparations will stand or fall on the truth and not on what the manufacturer may say about them. The time for continuous adverse comment has gone; the time for judicious commendation has come, and we shall start the new year—and the new volume of the JOURNAL—with some words of that sort. Our advertisers are good; their preparations are good; they should be understood and supported and our readers should take a positive and personal interest in them.

The importance of the bacillus coli communis as a primary bacterial factor in the development of

ETIOLOGICAL FACTORS IN APPENDICITIS

appendicitis has been generally asserted by most writers upon the subject. To question at this late